Electrical Technology Certificate (ELTC)

This program is designed to prepare the student for entry-level employment as an electrical/electronic maintenance technician. Students are provided with knowledge and experiences in the areas of electrical wiring, blueprint reading, basic and industrial electronics, programmable controllers, and industrial control systems. The program provides individuals with an opportunity to update their technical knowledge and skills with training and experiences using state-of-the-art high-technology equipment.

All courses in the program may be applied to the Associate in Applied Science degree in Electrical Technology.

Upon successful completion of this program, graduates will be able to:

- operate and program programmable logic controllers.
- hardwire electromechanical circuits from ladder diagrams.
- plan selected electrical installations as required on residential construction.
- design ladder diagrams to provide specific logic functions for a given industrial control problem.
- demonstrate effective communication skills by writing technical reports based on laboratory experiences.
- demonstrate critical thinking/problem-solving abilities by analyzing a nonfunctioning electrical circuit, determining the problem, and restoring circuit operation.
- demonstrate interpersonal relations, teamwork, and work ethics through group laboratory projects.
- demonstrate an ability to use and apply mathematical quantitative reasoning to design basic functional electronic circuits.
- demonstrate an ability to use and work with computers by writing laboratory reports using a word processing package.
- demonstrate use of computer software packages by simulating circuit operations and obtaining valid circuit parameters.

First Semester		**Credits**
BGT 110	Fundamentals of Technology	3
ELE 120	DC Circuits	4
HAC 140	Electrical Maintenance I	3
		10
Second Semester		
ELE 130	Digital Fundamentals	4
MAT 130*	Industrial Mathematics	3
		7
Third Semester		
ELE 165	AC Circuits	4
ELE 235	Programmable Controllers	2
HAC 119	Blueprint Reading	3
		9
Fourth Semester		
HAC 155	Electrical Maintenance II	3
ELE 210	Electronic Circuits	4
HAC 160	Residential Wiring	3
		10
	Credit Total	**36**

*MAT 160 or higher level course will also satisfy the mathematics requirement.

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